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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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12/14/2004

Douglas Ray Duquette

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MBHB/TRADING TECHNOLOGIES
300 SOUTH WACKER DRIVE
SUITE 3200
CHICAGO, IL 60606

EXAMINER

VEZERIS, JAMES A

ART UNIT

PAPER NUMBER

3693

MAIL DATE

DELIVERY MODE

11/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/517,960	Applicant(s) DUQUETTE, DOUGLAS RAY	
	Examiner JAMES A. VEZERIS	Art Unit 3693	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-8, 36-38 and 50-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-8, 36-38, and 50-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/23/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

Non-Final Action

Response to Applicant's Arguments

1. Applicant's arguments, see Page 14 of remarks, filed 7/23/2008, with respect to claims 5-8, 36, and 38 being rejected under 102(b) by Waelbroeck have been fully considered and are persuasive. Examiner notes Waelbroeck did not qualify as a 102(b) rejection. The rejections of claims 5-8, 36, and 38 have been withdrawn.
2. Applicant's arguments with respect to claim 37 have been considered but are moot in view of the new ground(s) of rejection.
3. Applicant's arguments, see page 13 of remarks, filed 7/23/2008, with respect to the abstract have been fully considered and are persuasive. The objection of the abstract has been withdrawn.
4. Applicant responded to an objection to claim 5, which the examiner never objected to. Examiner assumes the applicant meant to respond to the objection of claim 8. The objection is withdrawn in light of the amendment to claims 6 and 8.

Detailed Action

Claim Rejections- 35 U.S.C. 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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6. Claims 5-8, 36-38, and 50-54 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In order for a method to be considered a "process" under §101, a claimed process must either: (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials). *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method is not a patent eligible process under §101 and is non-statutory subject matter. Examiner would like to inform the applicant that structure added to a preamble is not enough to tie a method to another statutory class. System structure must be included in the body of the claims.

Claim Objection

7. Claim 6 is objected to because of the following informalities: The term "substantially perpendicular" is indefinite. Appropriate correction is required.

Claim Rejections- 35 U.S.C. 112 2nd Paragraph

8. Claim 8 recites the limitation "a first axis" in the body of the claim. There is insufficient antecedent basis for this limitation in the claim. A first axis is already claimed in claim 6, from which claim 8 is dependent.

Claim Rejections- 35 U.S.C. 102(e)

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9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 5-8, 36-38, and 50-59 are rejected under 35 U.S.C. 102(e) as being anticipated by US PG-Pub 2003/0004853 A1 by Ram et al. (Hereinafter “Ram”)

Regarding Claim 5.

Ram teaches:

- a. receiving transaction information regarding a selected security, said information including price of at least one trade; (See Fig. 14, Paragraphs 231-233)
- b. receiving order book information regarding open orders for a selected security; (See Fig. 20, Paragraph 243)
- c. determining responsive to said transaction information and said order book information whether each of a user-selected range of trades represented in said transaction information was seller-initiated or buyer-initiated; (See Fig. 20) Examiner notes that a “buy” indicates it was buyer initiated and a “sell” indicates it was seller initiated. Examiner notes the arguments given in response to the original non-final rejection, but notes the claims are being read in light of the broadest reasonable interpretation.
- d. displaying for each trade of a user-selected security within said user-selected

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range of transactions represented in said transaction information an indicium representing said price of such trade, said indicium having an appearance distinguishing between buyer-initiated and seller-initiated trades; and (See Fig. 20)

e. displaying at least a subset of said order book information relating to said user-selected security adjacent said indicia. (See Fig. 20)

Regarding Claim 6.

Ram further teaches where said step d. thereof further comprises the step of: displaying said trades in a two-dimensional chart having a first axis representing trade price and a second axis being substantially perpendicular to the first axis and representing time. (See Figure 20, Figure 23)

Regarding Claim 7.

Ram further teaches: grouping said trades into one or more auction events, the trades in each auction event being related to one another as determined by user-selectable criteria; and wherein said step d. thereof further comprises the step of: (See Figure 20, Paragraph 17)

displaying said trades in a two-dimensional chart having a first axis representing trade price and a second axis representing time of initiation of an auction event. (See Figure 20)

Regarding Claim 8.

Ram further teaches wherein said order book information includes at least one proposed transaction price, and said step e. thereof further comprises the step of:

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displaying at least a subset of said order book information adjacent a first axis such that said at least one proposed transaction price is aligned with a position corresponding to said proposed transaction price on said first axis. (See figure 20)

Regarding Claim 36.

Ram further teaches wherein said step of receiving order book information further comprises:

receiving said order book information as part of a universal data structure including at least one bid price and a respective quantity of units sought to be purchased at each of such bid prices, and at least one offer price and a respective quantity of units sought to be sold at each of such offer prices. (See Figure 12)

Regarding Claim 37.

Ram further teaches:

receiving a universal data structure including, for said at least one security: a lowest trade price observed for said security during a current trading day; a highest trade price observed for said security during the current trading day; a change in price observed since the current trading day began. (See Figure 12)

Regarding Claim 38.

Ram further teaches wherein said steps of receiving transaction information and receiving order book information further comprise:

receiving said transaction information and order book information regarding said selected security from an exchange server operatively coupled to a market data system of a securities exchange using a universal data structure for data from all exchanges

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and for all products traded. (Paragraph 27)

Regarding Claims 50 and 55.

Ram teaches:

receiving transaction information for a tradable object including price of at least one executed trade for the security; (See Fig. 14, Paragraphs 231-233)

receiving order book information for open orders for the tradable object, the open orders including at least one bid and at least one offer for the tradable object; (See Fig. 20, Paragraph 243)

receiving a user-selected range of trades associated with the transaction information; (See Figure 20)

in response receiving the transaction information and the order book information, determining whether each of the trades in the user-selected range represent seller-initiated or buyer-initiated trades or are not determinable; (See Fig. 20) Examiner notes that a “buy” indicates it was buyer initiated and a “sell” indicates it was seller initiated. Examiner notes the arguments given in response to the original non-final rejection, but notes the claims are being read in light of the broadest reasonable interpretation.

displaying in a two-dimensional chart for each trade in the user-selected range, an indicator representing the trade price where the indicator distinguishes between buyer-initiated trades, seller-initiated trades and non-determinable trades. (See Fig. 20)

Regarding Claims 51 and 56.

Ram further teaches displaying at least a subset of the order book information associated with the user-selected security. (See Fig. 20)

Regarding Claims 52 and 57.

Ram further teaches the two-dimensional chart comprises a first axis representing trade price and a second axis being substantially perpendicular to the first axis and representing time of initiation of an auction event. (See Figure 20, Figure 23)

Regarding Claims 53 and 58.

Ram further teaches grouping the trades by an auction event, trades in an auction event being related as determined by at least one user-selectable criterion. (See Figure 20, Paragraph 17)

Regarding Claims 54 and 59.

Ram further teaches the order book information comprises a proposed transaction price, and the method further comprises displaying at least a subset of said order book information adjacent a first axis aligning the proposed transaction price with a position corresponding to said proposed transaction price on the first axis. (See Figure 20, Figure 23)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES A. VEZERIS whose telephone number is (571)270-1580. The examiner can normally be reached on Monday-alt. Fridays 7:30am-5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Kramer can be reached on 571-272-6803. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James A. Kramer/
Supervisory Patent Examiner, Art Unit 3693

/JAMES A VEZERIS/
Examiner, Art Unit 3693

11/21/2008